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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/580,826

01/03/2007

Yoshihisa Doi

65341.00007

8305

32294

7590

09/16/2009

SQUIRE, SANDERS & DEMPSEY L.L.P.
8000 TOWERS CRESCENT DRIVE
14TH FLOOR
VIENNA, VA 22182-6212

EXAMINER

JENNINGS, STEPHANIE M

ART UNIT

PAPER NUMBER

3725

MAIL DATE

DELIVERY MODE

09/16/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/580,826	Applicant(s) DOI ET AL.	
	Examiner Stephanie Jennings	Art Unit 3725	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 August 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 11-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 11-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 February 2009 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>18 August 2009</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see page 6, filed August 18, 2009, with respect to final rejection of June 1, 2009 have been fully considered and are persuasive. The final rejection of June 1, 2009 has been withdrawn.

Claim Rejections - 35 USC § 103

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1-8, 11-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent Application Publication No. 61-126940 in view of Hayes US Patent No. 5,531,085 and in further view of Oohama et al. US Patent Application Publication No. 20030168126 and in further view of Japanese Patent Application Publication No. 2002059241. Japanese Patent Application Publication No. 61-126940 discloses a forging method for applying a lubricant to a workpiece (11a) in multiple steps. Japanese Patent Application Publication No. 61-126940 does not disclose applying the lubricant via spraying. Hayes teaches a lubrication system with nozzles (24) that are programmable to operate intermittently, a conveying unit (114, 116) for transferring the workpiece (column 3, line 51-column 4, line 19). It would have been obvious to one skilled in the art to provide the device of Japanese Patent Application Publication No. 61-126940 with the intermittent spraying lubrication nozzles of Hayes because intermittent lubrication application allows for incremental adjustment of

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lubrication as suited for processing needs. Japanese Patent Application Publication No. 61-126940 in view of Hayes does not disclose a forging method with a contact-velocity universal joint outer race as the workpiece or a method where the temperature ranges from 150°C to 250°C when the lubricant is applied. Oohama teaches a workpiece with a cup section (8) and a shaft section (7) (paragraph 78, see figure 2G). Regarding claims 3 and 12, Oohama teaches forging at a low temperature (paragraph 54); furthermore, Hayes discloses the claimed invention except for the specific temperature ranges. It would have been obvious to one having ordinary skill in the art at the time the invention was made to perform cold forging between 150°C to 250°C, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233. It would have been obvious to one skilled in the art to produce a cup- or shaft-shaped constant-velocity universal outer race as the forging product as it common product formed by forging presses well-known in the art. Japanese Patent Application Publication No. 61-126940 in view of Hayes and in further view of Oohama does not disclose a drying step between the two lubrication steps. Japanese Patent Application Publication 2002059241 teaches a lubricant applicator for a forging method with a drying station (3) after the lubricant is applied to the workpiece. It would have been obvious to one skilled in the art provide a means for drying between lubricant steps as complete drying of each lubricant layer ensures complete lubrication of the workpiece.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephanie Jennings whose telephone number is (571) 270-7392. The examiner can normally be reached on Monday-Thursday, 7 am - 5:30 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dana Ross can be reached on (571) 272-4480. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/S. J./
Examiner, Art Unit 3725
September 14, 2009

/Dana Ross/
Supervisory Patent Examiner, Art
Unit 3725